

## WEST

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## Search Results - Record(s) 1 through 20 of 24 returned.

 1. Document ID: US 20020134520 A1

L1: Entry 1 of 24

File: PGPB

Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020134520  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020134520 A1

TITLE: Soft and tough paper product with high bulk

PUBLICATION-DATE: September 26, 2002

## INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Behnke, Janica S.	Appleton	WI	US	
Larson, Kenneth C.	Appleton	WI	US	

US-CL-CURRENT: [162/100](#); [162/111](#), [162/112](#), [162/207](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
<a href="#">Draw Desc</a>	<a href="#">Image</a>										

 2. Document ID: US 20020096274 A1

L1: Entry 2 of 24

File: PGPB

Jul 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020096274  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020096274 A1

TITLE: Method of treating cellulose fibers and products obtained thereby

PUBLICATION-DATE: July 25, 2002

## INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lindstrom, Eva	Sundsvall		SE	
Eichhorn, Stephan	Gernsheim		DE	
Sandberg, Sussan	Onsala		SE	
Chihani, Thami	Gernsheim		DE	

US-CL-CURRENT: [162/72](#); [162/100](#), [162/90](#)

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	Claims	KWIC
<a href="#">Draw Desc</a>	<a href="#">Image</a>										

3. Document ID: US 20010020520 A1

L1: Entry 3 of 24

File: PGPB

Sep 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010020520  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20010020520 A1

TITLE: Steam explosion treatment with addition of chemicals

PUBLICATION-DATE: September 13, 2001

## INVENTOR- INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Hu, Sheng-Hsin	Appleton	WI	US	
Sun, Tong	Neenah	WI	US	

US-CL-CURRENT: 162/9; 162/100, 162/158, 162/182, 162/183

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

 4. Document ID: US 6468392 B2

L1: Entry 4 of 24

File: USPT

Oct 22, 2002

US-PAT-NO: 6468392  
DOCUMENT-IDENTIFIER: US 6468392 B2

TITLE: Soft chemi-mechanically embossed absorbent paper product and method of making same

DATE-ISSUED: October 22, 2002

## INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Oriarian; T. Philips	Appleton	WI		
Schulz; Galyn A.	Greenville	WI		
Gracyalny; Dale T.	Appleton	WI		
Hennes; Michael E.	Neenah	WI		
Kershaw; Thomas N.	Neenah	WI		
Awofeso; Anthony O.	Appleton	WI		

US-CL-CURRENT: 162/109; 162/112, 162/113, 162/117, 162/135, 162/136, 162/158, 162/186, 427/421

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc	Image									

 5. Document ID: US 6458245 B1

L1: Entry 5 of 24

File: USPT

Oct 1, 2002

US-PAT-NO: 6458245  
DOCUMENT-IDENTIFIER: US 6458245 B1

**TITLE: CTMP-process**

**DATE-ISSUED: October 1, 2002**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hoglund; Hans	Matfors			SE
Back; Roland	Njurunda			SE
Danielsson; Ove	Stockholm			SE
Falk; Bo	Jarfalla			SE

**US-CL-CURRENT: 162/149; 162/100**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc		Image								

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**6. Document ID: US 6425979 B1**

L1: Entry 6 of 24

File: USPT

Jul 30, 2002

US-PAT-NO: 6425979

DOCUMENT-IDENTIFIER: US 6425979 B1

**TITLE: Method for making superabsorbent containing diapers**

**DATE-ISSUED: July 30, 2002**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hansen; Michael R.	Seattle	WA		
Young, Sr.; Richard H.	Renton	WA		

**US-CL-CURRENT: 162/173; 162/185, 162/221, 428/357, 523/204, 524/13**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc		Image								

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**7. Document ID: US 6344109 B1**

L1: Entry 7 of 24

File: USPT

Feb 5, 2002

US-PAT-NO: 6344109

DOCUMENT-IDENTIFIER: US 6344109 B1

**TITLE: Softened comminution pulp**

**DATE-ISSUED: February 5, 2002**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gross; James R.	Cordova	TN		

**US-CL-CURRENT: 162/100; 162/158, 162/182, 162/9**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KOMC

 8. Document ID: US 6264791 B1

L1: Entry 8 of 24

File: USPT

Jul 24, 2001

US-PAT-NO: 6264791

DOCUMENT-IDENTIFIER: US 6264791 B1

TITLE: Flash curing of fibrous webs treated with polymeric reactive compounds

DATE-ISSUED: July 24, 2001

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sun; Tong	Neenah	WI		
Lindsay; Jeffrey D.	Appleton	WI		

US-CL-CURRENT: 162/168.1, 162/100, 162/157.1, 162/157.6, 162/158, 162/164.1, 162/168.3,  
162/17, 162/184, 162/185, 162/19, 162/9, 8/116.1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

KOMC

 9. Document ID: US 6074524 A

L1: Entry 9 of 24

File: USPT

Jun 13, 2000

US-PAT-NO: 6074524

DOCUMENT-IDENTIFIER: US 6074524 A

TITLE: Readily defibered pulp products

DATE-ISSUED: June 13, 2000

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wu; Jian	Seattle	WA		
West; Hugh	Seattle	WA		
Grant; Terry M.	Auburn	WA		

US-CL-CURRENT: 162/100, 162/181.8, 241/28, 428/357, 428/375

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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 10. Document ID: US 6068734 A

L1: Entry 10 of 24

File: USPT

May 30, 2000

US-PAT-NO: 6068734

DOCUMENT-IDENTIFIER: US 6068734 A

**TITLE: Soft, bulky absorbent paper containing chemithermomechanical pulp**

**DATE-ISSUED: May 30, 2000**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wallenius; Hans	Ljungskile			SE
Nordqvist; Bengt	Molnlycke			SE

**US-CL-CURRENT: 162/141; 162/100, 162/142, 162/147, 162/149**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc Image										

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**11. Document ID: US 6019871 A**

L1: Entry 11 of 24

File: USPT

Feb 1, 2000

US-PAT-NO: 6019871

DOCUMENT-IDENTIFIER: US 6019871 A

**TITLE: Effective utilization of sap in producing non-woven webs using the foam process**

**DATE-ISSUED: February 1, 2000**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rokman; Kay	Karhula			FI
Jansson; Juhani	Karhula			FI
Laine; Eino	Kyminlinna			FI

**US-CL-CURRENT: 162/101; 162/100, 162/123, 162/124, 162/125, 162/127, 162/129,  
162/168.1, 162/183, 162/212**

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
Draw Desc Image										

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**12. Document ID: US 5807465 A**

L1: Entry 12 of 24

File: USPT

Sep 15, 1998

US-PAT-NO: 5807465

DOCUMENT-IDENTIFIER: US 5807465 A

**TITLE: Granular material containing recycled paper components**

**DATE-ISSUED: September 15, 1998**

**INVENTOR-INFORMATION:**

NAME	CITY	STATE	ZIP CODE	COUNTRY
Knapick; Edward G.	Ogdensburg	NJ		
Willemsen; Brent	Westfield	NJ		
Wolfer; Ernest P.	Allendale	NJ		

US-CL-CURRENT: 162/100; 119/172, 428/372

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC		
<a href="#">Draw</a>	<a href="#">Desc</a>	<a href="#">Image</a>										

 13. Document ID: US 5725601 A

L1: Entry 13 of 24

File: USPT

Mar 10, 1998

US-PAT-NO: 5725601

DOCUMENT-IDENTIFIER: US 5725601 A

TITLE: Process for producing water-absorbent cross-linked, carboxyalkylated cellulose-containing material

DATE-ISSUED: March 10, 1998

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tajiri; Kozo	Tokyo			JP
Maeda; Masayo	Kawasaki			JP
Tsukamoto; Haruo	Matsudo			JP

US-CL-CURRENT: 8/120; 162/100, 162/142, 162/146, 162/148, 162/157.6, 162/182, 162/72, 162/74, 162/9, 162/95, 8/115.7, 8/116.1, 8/181, 8/191, 8/193, 8/194

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC		
<a href="#">Draw</a>	<a href="#">Desc</a>	<a href="#">Image</a>										

 14. Document ID: US 5589256 A

L1: Entry 14 of 24

File: USPT

Dec 31, 1996

US-PAT-NO: 5589256

DOCUMENT-IDENTIFIER: US 5589256 A

TITLE: Particle binders that enhance fiber densification

DATE-ISSUED: December 31, 1996

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hansen; Michael R.	Seattle	WA		
Young, Sr.; Richard H.	Renton	WA		

US-CL-CURRENT: 442/417; 156/296, 156/305, 156/62.6, 156/62.8, 162/136, 162/141, 162/157.6, 162/158, 162/159, 162/161, 162/163, 162/182, 162/184, 162/205, 19/145, 19/148, 19/304, 38/144, 424/402, 424/403, 424/404, 427/180, 427/196, 427/212, 427/214, 427/336, 427/365, 427/392, 427/394, 427/396, 427/402, 428/361, 428/372, 428/380, 428/74, 428/76, 428/902, 604/304, 604/307, 604/365, 604/367, 604/374, 604/375, 604/378, 8/115.51, 8/115.54, 8/115.6, 8/115.7, 8/116.4, 8/120, 8/127.6, 8/128.1, 8/186

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KMC		
<a href="#">Draw</a>	<a href="#">Desc</a>	<a href="#">Image</a>										

15. Document ID: US 5358607 A

L1: Entry 15 of 24

File: USPT

Oct 25, 1994

US-PAT-NO: 5358607

DOCUMENT-IDENTIFIER: US 5358607 A

TITLE: Porous low density shot-like degradable absorbent materials and manufacturing process therefor

DATE-ISSUED: October 25, 1994

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ellis; Douglas E.	White Rock, British Columbia			CA

US-CL-CURRENT: 162/100; 119/172, 162/158, 162/168.1, 162/175, 162/189, 162/DIG.9,  
210/924, 264/115, 264/117, 264/118, 264/122, 264/140, 264/141

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc		Image								

 16. Document ID: US 5066363 A

L1: Entry 16 of 24

File: USPT

Nov 19, 1991

US-PAT-NO: 5066363

DOCUMENT-IDENTIFIER: US 5066363 A

TITLE: Method of forming pulp bales with dissolvable PVA baling strap material

DATE-ISSUED: November 19, 1991

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lee; Richard P.	Hagerstown	MD		
Ley; Joseph F.	DePere	WI		
Mortensen; John A.	Little Silver	NJ		

US-CL-CURRENT: 162/100; 100/1, 162/201, 206/83.5, 241/46.17, 428/913

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KOMC
Draw Desc		Image								

 17. Document ID: US 4931139 A

L1: Entry 17 of 24

File: USPT

Jun 5, 1990

US-PAT-NO: 4931139

DOCUMENT-IDENTIFIER: US 4931139 A

TITLE: Degradable absorbent material and manufacturing process therefor

DATE-ISSUED: June 5, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Phillips; Christopher R.	Bellingham	WA		

US-CL-CURRENT: 162/100, 119/172, 162/147, 162/169, 162/189, 162/DIG.9, 210/680,  
210/693, 210/924, 264/118, 264/122, 264/141, 428/913

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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18. Document ID: US 4917762 A

L1: Entry 18 of 24

File: USPT

Apr 17, 1990

US-PAT-NO: 4917762

DOCUMENT-IDENTIFIER: US 4917762 A

TITLE: Process for manufacturing a liquid absorbing pad

DATE-ISSUED: April 17, 1990

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Dalki r; Peter	DK-2930 Klampenborg			DK

US-CL-CURRENT: 162/5, 162/100, 162/158, 162/201, 241/28, 264/115, 264/116, 264/121

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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19. Document ID: US 4734393 A

L1: Entry 19 of 24

File: USPT

Mar 29, 1988

US-PAT-NO: 4734393

DOCUMENT-IDENTIFIER: US 4734393 A

TITLE: Non-clay oil and grease absorbent

DATE-ISSUED: March 29, 1988

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lowe; H. Edward	Cassopolis	MI		
Yoder; Ricky L.	Elkhart	IN		
Nelson; Clayton C.	Granger	IN		

US-CL-CURRENT: 502/404, 162/100, 162/DIG.9, 502/401, 510/215

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments
Draw Desc	Image								

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20. Document ID: US 4689118 A

L1: Entry 20 of 24

File: USPT

Aug 25, 1987

US-PAT-NO: 4689118

DOCUMENT-IDENTIFIER: US 4689118 A

TITLE: Cross-linked pore containing microfibrillated cellulose prepared by freezing and solvent exchange

DATE-ISSUED: August 25, 1987

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Makoui; Kambiz B.	Menasha	WI		
Chatterjee; Pronoy K.	Spotswood	NJ		

US-CL-CURRENT: 162/100, 162/102, 162/158, 162/164.3, 162/182, 162/9, 604/369, 604/374

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWIC
<a href="#">Draw Desc</a>	<a href="#">Image</a>									

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Term	Documents
ABSORBENT.USPT,PGPB.	53965
ABSORBENTS.USPT,PGPB.	7661
162/100.EPAB,JPAB,USPT,PGPB.	397
162/136.EPAB,JPAB,USPT,PGPB.	168
162/221.EPAB,JPAB,USPT,PGPB.	30
162/223.EPAB,JPAB,USPT,PGPB.	76
((162/221   162/223   162/136   162/100)!.CCLS.) AND (ABSORBENT.CLM.).USPT,PGPB,JPAB,EPAB,DWPI.	24
(ABSORBENT.CLM. AND ((162/100  162/136  162/221  162/223 )!.CCLS. )).USPT,PGPB,JPAB,EPAB,DWPI.	24

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## Search Results - Record(s) 21 through 24 of 24 returned.

 21. Document ID: US 4655758 A

L1: Entry 21 of 24

File: USPT

Apr 7, 1987

US-PAT-NO: 4655758

DOCUMENT-IDENTIFIER: US 4655758 A

TITLE: Microbial polysaccharide articles and methods of production

DATE-ISSUED: April 7, 1987

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ring; David F.	Skillman	NJ		
Nashed; Wilson	North Brunswick	NJ		
Dow; Thurman	Somerville	NJ		

US-CL-CURRENT: 604/374; 162/100, 602/43, 602/49             
  22. Document ID: US 4432833 A

L1: Entry 22 of 24

File: USPT

Feb 21, 1984

US-PAT-NO: 4432833

DOCUMENT-IDENTIFIER: US 4432833 A

TITLE: Pulp containing hydrophilic debonder and process for its application

DATE-ISSUED: February 21, 1984

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Breese; John A.	Appleton	WI		

US-CL-CURRENT: 162/158; 162/100, 162/201, 604/374, 604/375             
  23. Document ID: US 4134948 A

L1: Entry 23 of 24

File: USPT

Jan 16, 1979

US-PAT-NO: 4134948

DOCUMENT-IDENTIFIER: US 4134948 A

TITLE: Method of making a nonwoven fabric

DATE-ISSUED: January 16, 1979

## INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Baker, Jr.; John H.	Philadelphia	PA		

US-CL-CURRENT: 264/518; 156/209, 156/220, 156/296, 162/115, 162/117, 162/136, 162/231,  
264/119, 264/121, 264/122, 264/128, 264/129, 264/557, 428/171, 55/521

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
<a href="#">Drawn Desc</a>   <a href="#">Image</a>										

 24. Document ID: US 3773613 A

L1: Entry 24 of 24

File: USPT

Nov 20, 1973

US-PAT-NO: 3773613

DOCUMENT-IDENTIFIER: US 3773613 A

TITLE: METHOD FOR CONVERTING PLASTIC-CONTAINING BROKE TO FLUFF

DATE-ISSUED: November 20, 1973

## INVENTOR- INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Lee; Charles A.	Knoxville	TN		
Granberg; Frederick M.	Knoxville	TN		

US-CL-CURRENT: 162/191; 162/100, 162/264, 162/4, 241/19, 241/196, 241/23, 241/28

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">KMC</a>
<a href="#">Drawn Desc</a>   <a href="#">Image</a>										

Term	Documents
ABSORBENT.USPT,PGPB.	53965
ABSORBENTS.USPT,PGPB.	7661
162/100.EPAB,JPAB,USPT,PGPB.	397
162/136.EPAB,JPAB,USPT,PGPB.	168
162/221.EPAB,JPAB,USPT,PGPB.	30
162/223.EPAB,JPAB,USPT,PGPB.	76
((162/221   162/223   162/136   162/100)!.CCLS.) AND (ABSORBENT.CLM.).USPT,PGPB,JPAB,EPAB,DWPI.	24
((ABSORBENT.CLM. AND ((162/100  162/136  162/221  162/223 !)!.CCLS. ))).USPT,PGPB,JPAB,EPAB,DWPI.	24

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## Search Results - Record(s) 1 through 3 of 3 returned.

 1. Document ID: US 4548617 A

L4: Entry 1 of 3

File: USPT

Oct 22, 1985

US-PAT-NO: 4548617

DOCUMENT-IDENTIFIER: US 4548617 A

TITLE: Abrasive and method for manufacturing the same

DATE-ISSUED: October 22, 1985

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Miyatani; Takashi	Yokohama			JP
Nakata; Junji	Yokohama			JP
Seki; Kisuke	Tokyo			JP
Kageyama; Takafumi	Osaka			JP

US-CL-CURRENT: 51/293; 264/118, 51/295, 51/298

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KIMC</a>
<a href="#">Draw Desc</a>	<a href="#">Image</a>										

 2. Document ID: US 4418028 A

L4: Entry 2 of 3

File: USPT

Nov 29, 1983

US-PAT-NO: 4418028

DOCUMENT-IDENTIFIER: US 4418028 A

TITLE: Filtration block for liquid metals and alloys, with a mechanical and physical-chemical effect

DATE-ISSUED: November 29, 1983

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
du Manoir de Juaye; Pierre	Vimines Cognin			FR
Guerit; Pierre	Chambery			FR
Pollet; Gilbert	LaRavoire			FR
Vassiliadis; Marc	Saint Germain en Laye			FR

US-CL-CURRENT: 264/43; 264/109, 264/115, 264/118, 264/125, 264/330

<a href="#">Full</a>	<a href="#">Title</a>	<a href="#">Citation</a>	<a href="#">Front</a>	<a href="#">Review</a>	<a href="#">Classification</a>	<a href="#">Date</a>	<a href="#">Reference</a>	<a href="#">Sequences</a>	<a href="#">Attachments</a>	<a href="#">Claims</a>	<a href="#">KIMC</a>
<a href="#">Draw Desc</a>	<a href="#">Image</a>										

3. Document ID: US 4104347 A

L4: Entry 3 of 3

File: USPT

Aug 1, 1978

US-PAT-NO: 4104347

DOCUMENT-IDENTIFIER: US 4104347 A

TITLE: Method of making a sand mold

DATE-ISSUED: August 1, 1978

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ohashi; Yoshinobu	Nishinomiya			JP
Inoue; Shizuo	Amagasaki			JP

US-CL-CURRENT: 264/113; 164/17, 264/118, 264/162, 264/219

Full	Title	Citation	Front	Review	Classification	Date	Reference	Sequences	Attachments	KWMC

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Term	Documents
BLOCK.USPT,PGPB.	914419
BLOCKS.USPT,PGPB.	317082
(2 AND (BLOCK.CLM.)).USPT,PGPB.	3
(L2 AND BLOCK.CLM.).USPT,PGPB.	3

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L5: Entry 7 of 10

File: USPT

Apr 24, 1984

US-PAT-NO: 4444830

DOCUMENT-IDENTIFIER: US 4444830 A

TITLE: Method for preparing absorbent fibrous fluff

DATE-ISSUED: April 24, 1984

## INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Erickson; Robert E.	Midland	MI		

US-CL-CURRENT: 442/268; 156/153, 241/28, 264/118, 428/913, 442/373, 442/381, 604/368,  
604/378

## CLAIMS:

What is claimed is:

1. A method for preparing a fibrous fluff of improved absorbency, said method comprising passing a base fluffing material through a zone wherein an aqueous solution of polymer which has been formulated into an absorbent composition is coated on the base fluffing material, the absorbent coated base fluffing material composite is then dried and finally disintegrated and worked by mechanical means into a plurality of absorbent fluff fibers.
2. The method of claim 1 wherein the aqueous solution of absorbent polymer comprises an aqueous solution of a lightly cross-linked alkali metal carboxylic polyelectrolyte.
3. The method of claim 2 wherein the polyelectrolyte is cross-linked with a polyfunctional or difunctional cross-linking agent that is reactive with carboxylate groups.
4. The method of claim 3 wherein the polyfunctional cross-linking agent is a polyamide-polyamine epichlorohydrin adduct.
5. The method of claim 3 wherein the polyfunctional cross-linking agent is a diglycidyl ether.
6. The method of claim 2 wherein the polyelectrolyte consists of an alkali metal salt of a polyacrylate.
7. The method of claim 2 wherein the polyelectrolyte consists of a terpolymer of ethyl acrylate, sodium acrylate and sodium methacrylate with 50 mole percent being ethyl acrylate.
8. A method of claim 7 wherein the polyelectrolyte comprises a 25 percent aqueous solution by volume consisting of 52 mole percent ethyl acrylate, 28 mole percent sodium methacrylate, and 28 mole percent sodium acrylate, and having a pH range of from about 6 to about 8.
9. The method of claim 1 wherein the absorbent composition comprises a solution

consisting of acrylic terpolymer, polyoxyethylene sorbitan monolaurate, polyamide/epichlorohydrin resin and glycerine.

10. The method of claim 9 wherein the absorbent composition comprises a solution of from about 71.5 to about 94.4 weight percent acrylic polymer, from about 5 to about 1 weight percent polyoxyethylene sorbitan monolaurate, from about 1.0 to about 0.6 weight percent polyamide epichlorohydrin resin, and from 0 to about 27.0 weight percent glycerine.

11. A method of claim 1 wherein the drying temperature range is from about 150.degree. F. to about 350.degree. F.

12. A method of claim 4 wherein the drying temperature is about 250.degree. F.

13. The absorbent fluff prepared according to the method of claim 1.

14. The absorbent fluff prepared according to the method of claim 2.

15. An absorbent device which comprises the absorbent fluff of claim 13, a water-impermeable bottom sheet and a water-permeable face sheet.

16. An absorbent device which comprises the absorbent fluff of claim 13, one or more layers of intermediate wicking sheets, a water-impermeable bottom sheet and a water-permeable face sheet.

17. An absorbent device which comprises the absorbent fluff of claim 14, a water-impermeable bottom sheet and a water-permeable face sheet.

18. An absorbent device which comprises the absorbent fluff of claim 14, one or more layers of intermediate wicking sheets, a water-impermeable bottom sheet and a water-permeable face sheet.

19. The absorbent device of claim 15 wherein said water-impermeable bottom sheet comprises a flexible hydrophilic absorbent laminate having a central, substantially continuous and uniform film consisting of a lightly cross-linked carboxylic polyelectrolyte and a layer of wicking substrates bonded to both sides of said film.

20. The absorbent device of claim 17 wherein said water-impermeable bottom sheet comprises a flexible hydrophilic absorbent laminate having a central, substantially continuous and uniform film consisting of a lightly cross-linked carboxylic polyelectrolyte and a layer of wicking substrates bonded to both sides of said film.

21. The absorbent device of claim 19 wherein said water-impermeable bottom sheet is polyethylene and said face sheet is a nonwoven fiber mat.

22. The absorbent device of claim 20 wherein said water-impermeable bottom sheet is polyethylene and said face sheet is a nonwoven fiber mat.

23. The absorbent device of claim 19 wherein said intermediate wicking sheets are selected from a group consisting of woven fabrics, paper tissues, nonwoven fiber mats, polymeric foams, and flexible hydrophilic absorbent laminate.

24. The absorbent device of claim 20 wherein said intermediate wicking sheets are selected from a group consisting of woven fabrics, paper tissues, nonwoven fiber mats, polymeric foams, and flexible hydrophilic absorbent laminates.